

Title (en)  
DIESEL ENGINE CYLINDER DEACTIVATION MODES

Title (de)  
ZYLINDERDEAKTIVIERUNGSMODI EINES DIESELMOTORS

Title (fr)  
MODES DE DÉSACTIVATION DE CYLINDRES DE MOTEUR DIESEL

Publication  
**EP 3894682 A1 20211020 (EN)**

Application  
**EP 19828560 A 20191213**

Priority  
• US 201862779554 P 20181214  
• EP 2019025458 W 20191213

Abstract (en)  
[origin: WO2020119951A1] When selecting cylinders of a multi-cylinder diesel engine in an engine system for cylinder deactivation (CDA), a method can comprise designating a first resonance around a first periodic frequency output of the engine system as a primary boundary and designating a second resonance around a second periodic frequency output of the engine system as a secondary boundary. Selecting cylinders can comprise selecting one of half, one third, or two thirds of the multiple cylinders for CDA while firing the remaining multiple cylinders. The selection can be made so that the periodic frequency output of the engine is between the primary and secondary boundaries. A compact periodic frequency band can be implemented to further restrict the selection of cylinders for CDA. The first periodic frequency output can be about 15 Hertz +/- 1.5 Hertz and the second periodic frequency output can be between 30-40 Hertz +/- 1.5 Hertz.

IPC 8 full level  
**F02D 41/00** (2006.01); **B60W 30/20** (2006.01); **F02D 13/06** (2006.01); **F02D 41/08** (2006.01); **F02D 41/14** (2006.01)

CPC (source: EP US)  
**F02D 13/06** (2013.01 - EP US); **F02D 41/0087** (2013.01 - EP US); **F02D 41/08** (2013.01 - US); **F02D 41/1498** (2013.01 - EP US); **F02D 41/08** (2013.01 - EP); **F02D 2041/0012** (2013.01 - EP US); **F02D 2200/025** (2013.01 - EP US); **F02D 2200/101** (2013.01 - EP US); **Y02T 10/12** (2013.01 - EP)

Citation (search report)  
See references of WO 2020119951A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2020119951 A1 20200618**; CN 113260778 A 20210813; EP 3894682 A1 20211020; US 2022065178 A1 20220303

DOCDB simple family (application)  
**EP 2019025458 W 20191213**; CN 201980087143 A 20191213; EP 19828560 A 20191213; US 201917413775 A 20191213